RELATION OF CONATIVE CHARACTERISTICS AND SUCCESS OF PERFORMING DANCE STRUCTURES

UDC 793.3: 159.9.943

Radmila Kostić[1], Dragan Jocić[2], Slavoljub Uzunović[1]

[1]Faculty of physical education, University of Niš, Serbia and Montenegro
[2]Faculty of sport and physical education, University of Belgrade, Serbia and Montenegro

Abstract. *Research was conducted on a sample of 38 students of physical education from Niš. Purpose of this research was to determine influence of conative abilities on success in performing dance structures.*
Sample of variables included predictive (for conative dimension: Cornel index- version C.I.- N4 and Ajzenk's Maudsley Personality Inventory) and criterical (estimation of success of conducting dance structures of sport dance and folk dance). Particularity are processed with regressive analysis.
With this research, supposition that conative characteristics influence success of performing dance structures of sport and folk dance, was confirmed. Like predictor of success for this kind of dances, anxiety and hypochondria are specialy emphasize like factors of disturbance.

Key words: *conative characteristics, technic of dance structures, success.*

1. INTRODUCTION

Dance is special kind of moving activities for which performance different factors are essential including different abilities (cognitive, functional, motoric, musical) and characteristics (conative, anthropometric).

Dance is studied as a subject on Faculty of physical education. With a program of the subject dance structures which students should learn, are precised, and they represent part of dance technic sport and folk dance.

Autors are not attainable with research which treat links between conative characteristics and performing dance technic.

Mraković, M. (1978) the measurements of 693 males, 19 to 27 years old, using 37 coordination tests and extraversion tests from Eysenck's MPI, were analysed by regres-

---

sion analysis. In each case extraversion items served as predictors, and every coordination test as criterion. The nature of yielded relations is in correspondence with the hypothesis that extraverted-introverted modes of behaviour are not under the influence of general levels of excitation or inhibition only, but also under the influence of the functioning of control mechanisms which are producing the level of excitation and inhibition respectively, corresponding with ten immediate demands of activity.

Horga, S. (1979) researched links between anxiety and coordination. For evaluation of anxiety, A1 is 18PF, was applied, and for evaluation of coordination, 35 motorical test's. Differential influence of anxiety on individual levels of regulating mechanisms responsible for hypotetical sights of coordination, was determined. In this cases anxiety represented disturbing manifestation of coording regulating mechanisms.

Ećimović Žgajnjer, S. (1981) on a sample of 131 regular students of physical education had determined relation between three cognitive factors (spacial, verbal and numerical) and four conative factors (anxiety, inhibitorn conversion, aggression, shizoid tendencies) and success reproduction of melody, as musical competence. With regressive analysis of success in reproduction of melody in space of cognitive and conative factors importante closeness wasn't gained. Conative factors did not negative reflected on success in reproduction of melody.

Paunonen, S. (1998) condicted two studies evaluated personality trait measures and Big Five factor measures for in predicting important behaviour criteria. The results of both studies showed that this traits and the broader factors, trought to define two levels of a hierarchy of personality separately predicted most criterion variables. However, the incremental validity of trait measures (the degree to which the traits increased the criterion prediction achivement factors) was generally much larger than the incremental validity of the Big Five factors. It was concluded that aggregating personality traits into their underlying personality result in decreased predictive accuracy due to the loss of trait-specific but criterion variance.

Dunn, J., Dunn, C.J. (2001) examined in their study the degree to which the Sport Competition Anxiety Test (SCAT; Martens, 1977) and the Sport Anxiety Scale (SAS; Smith, Smoll& Schutz, 1990) shared variance with the four subscales of the Collegiate Hockey Worry Scale (CHWS; Dunn, 1999) a sport-specific measure of athletes' dispositional tendencies to worry about performance failure, negative social evaluation, physical danger, and situational uncertainty. Participants were 178 male intercollegiate ice hockey players. Correlation and regression analyses reinforced the links between worries about failure and negative social evaluation to competitive trait anxiety (CTA). However, neither the SCAT nor the SAS shared more than 5.8% of the variance surrounding athletes' worries pertaining to physical danger and situational uncertainty.

Davis, J., Cox, R. (2002) wanted in this study was to examine Jone's (1991) directionality hypothesis and Hanin's (200) individual zone of optimal functioning model. Swimmers' performance was examined to determine if cognitive and somatic anxiety within IZOFs would be reported as facilitative to performance. One 3x3 (cognitive anxiety x somatic anxiety) ANOVA was calculated using ipsative t scores as the performance dependent variable. Two separate one factor ANOVAs for cognitive and somatic direction scores as the dependent variables. Results indicated support for Hanin's IZOF theory relative to intensity of cognitive anxiety, however, interpretations of anxiety within IZOFs failed to provide support for the directional hypothesis.

Akandere, M., Tekim, A. (2002) investigated the effects of physical exercise to eliminate the anxiety in university youth. The sudy covered 311 students who had never involved in physical exercise or any from of physical exercise. They were from 7 different departments of Education Faculty of Konya Selcuk University. State Trait Anxiety Inventory (STAI) by Spielberger was applied to the students. The first who had the highest anxiety scores were determined. Half of 60 (30 students) participated in physical administered to both the test and control group. Results were estimated by ANOVA. As a result the anxiety level of female students was found to be higher comparison to males depending upon the gender. In addition, the results also showed that participation physical exercise and physical activities decreased the anxiety level of both sexes. According to the age, a similar level of anxiety was seen at the beginning. It appeared that those activities had a reduction in anxiety levels of all age categories. The reduction mentioned above was found highest in 19-20 age group. According to fields, the physical exercise activities played a very important role in minimizing the anxiety. This effect was the most reliable on the students of music departement. As a result, it has been concluded that physical exercise activities played a very notable role to eliminate anxiety of the university youth.

1.1. Problem

Problem of this paper are dance structures and effect of conative characteristics on their performance. Influence of conative characteristics is not the same for all individual sport activity. It can be positive and negative. There isn't any activity of a man which is immune on influence of conative factors. With this research attempt was made to determine possibility of their influence on success in performing some dance structures.

1.2. Aim

Determine effect of conative characteristics on success in performing technic of dance structures.

1.3. Hypothesis

H1 - It's supposed that certain conative characteristics have considerable influence in success of performing technic dance structures of sport dance.
H2 - It's supposed that certain conative characteristics have considerable influence in success of performing technic dance structures of folk dance.

2. METHODS OF RESEARCH

2.1. Sample of examinees

Sample of examinees comprised 38 second year students from physical education in Nish. Age of examinees spanned from 20 to 23. Sample included all students who visited schooling and exercise from subject dance and approached june examation term. Before approaching examation from subject dance students were tested on test for evaluation

their conative characteristics. Second discrimination of examinees wasn't made. Sample is treated as specific.

2.2. Sample of variables

Sample of variables included two groups: one for evaluation conative dimensiones (predictor variables) and other for evaluation of success in performing technic dance structures (criterion variables).

Predictor variables

1. For evaluation efficacy of the system for regulation and controle of organic function: -cardiovascular conversion (CVC); -gastrointestinal conversion (GIC); -inhibitory conversion (IHC); -hypochondria (HIP).

Regulator of organic function is formed with link of subcortical centres for regulation of organic functions predominant localised in hypothalamic region and them superior cortical systems for regulation and control. Disorder of this regulator causes functional confusion of basic organic systems, like cardiovascular, respiratory, gastrointestinal and excretion system; functional disorder sensor and motoric system; disorder of system for control especial braking elemental biotic processes.

2. For evaluation efficacy of the system for regulation and controle of defence reaction: -anxiety (ANX); -obsession (OBS); hypersensitivity (HIS); -fobical (FOB).

Regulator of defence reaction. Localise is probable in lumbrical system, it modulate tonic agitation partly based on programs transferred by genetic code, partly formed under the conditional influence in ontogenetic development. Model representing two way link between regulator of reaction of defence and regulator of organic functions, one way link between regulator reaction of defence and regulator attack and two way link between regulator reaction of defence and system for coordination and integration regulator functions; the same time both system are functionally superior together with central cognitive processor to system for regulator reaction of defence. Those are, before everything different modalities and symptoms anxiety, which create basic for especial modular pathological reactions which are fobical, opsesivity and compulsivity.

3. For evaluation efficacy of the system for regulation and controle of attack: -impulsiveness (IMP);- aggressiveness (AGR).

Regulator reaction of attack which is probable localised in lumbrical system, modulate primary tonic trill, but base on program for destructive reaction which are formed matter during filogenetic or ontogenetic development. Model allows and directly activate this program when is the matter primary aggression. Because anergetic potential which is needed for realisation to aggression model represents important link between regulators of attack and regulator of activity.

4. For evaluation efficacy of the system for homeostatical regulation: -paranoid (PRN); -depression (DEP).

System for coordination regulative functions coordinate functions subsystems which are functionally and hierarchically different including and functions of cognitive processors. Disorder of regulators for coordination regulative functions causes disorganisation and dissociation of cognitive and conative processes as well as disorder of motorical functions especially then which depend of system for regulation path trajectory of move-

ment and system for synergetic regulation and regulation of tonus. Schizoid, paranoid and maniacal symptoms are directly product of disorder of this system.

5. For evaluation efficacy of the system for regulation ekscitation and inhibition: - neuroticism(NEU)

System for integration regulative functions has the highest rang in hierarchy of conative systems. Basic function of this system is to ignore conative changes under form of structure psychological fields and especially under form of structure of social field and changes in that field.

Criterion variables

For evaluation of success in performing dance structures, two test's are applied: test SPO and test FLK.

Test SPO measures abilities of performing dance structures of sport dance. Technic of performance, style and coordination with music and partner, are evaluated. Students were dancing two of the following dances: Vienna Waltz, English Waltz, Tango, Cha-cha-cha and Samba.

Estetic-tehnical mistakes in students:
− dancing figures aren't danced in whole; dancing figures are not danced in correct order; dancing steps are not performed in accordance with style and character of concert dance; dancing out of dancing space (6x6 meters); turns are not finished in full amplitude; don't dance in dance direction; glance (look) pointed on the ground body stiffly; not moving in harmony with music; changing the rhythm of dancing steps inside of dancing figures; accent of wrong steps; changing the rhythm of whole dancing figures.

Valuation
− Student knows to perform five different dance figures which connect fluently. Moving perform technically and esthetical adjusted with music. Dancing pose correct (mark 10).
− Student knows to perform five different dance figures which connect fluently. Moving perform tehnically correct with aesthetic deficiency adjust with music. Dancing pose correct (mark 9).
− Student knows to perform four different dance figures which he knows to connect but that connection is not fluent. Moving is not entirely performed with music. Dancing pose with deficiency (mark 8).
− Student knows to perform three dancing figures which connects fluently, without mistakes (errors) in rhythm. Dancing pose "stiff" (mark 7).
− Student knows to perform three dancing figures. During the performance he mistakes in connecting rhythm and tehnic. Pose "stiff" (mark 6).
− All students which did not know to perform three dancing figures with little mistakes in tehnic and rhythm are marked with mark 5. If the student get two different marks in two dances, final mark is middle value.

Test FLK measures abilities of performing dance structures of folk dance. Technic of performance, style and rhythm, are evaluated. Students were dancing two of 12 folk dances from Serbia.

Valuation

For this test the same criteriums are applied like for the test SPO, only the number of dancing figures was different and it moved from one (only the "basic" step was danced) to seven, like in Moravac. Each student performed one folk dance with basic structure, and other with several different structures.

2.3. Methods for management particularity

Basic exibits of descriptive statistic were calculated: midle value (SV), standard deviation (SD), standard error of arithmetical middle (SG), maximum (MAX) and minimum (MIN). For determing ties between predictor and criterion variables, regression analysis was applied. Coefficient of multiple correlation were calculated (MC), percentage of explained variance (PEV), partial coefficient of correlation between predictor and criterion variables (PC), coefficient of correlation between predictor and criterion variables (COR), standard coefficients of partial regression of criterion variable in space of predictors (BETA), test that determines importance of coefficient multiple correlation (F) and importance of coefficient multiple correlation (K).

3. RESULTS AND DISCUSSION

System of predictor variables (variables conative dimensiones) considerable explains success of performing dance structures sport dance. Multiple correlation amounts to .43, and percentage of explained variance.18. Results of regresssive analysis are presented on Table 2. Characteristic which specialy contribute to success in realisation of dance structures in this kind of dance is anxiety. Coefficient is with negative presage, which points that anxiety disturbs success in performing dance structures in sport dance.

Table 1. Basic descriptive statistic parameter

Variable	SV	SD	SG	MAX	MIN
NEU	19.95	9.82	1.60	40	0
ANX	5.10	1.94	0.31	8	1
FOB	2.00	1.58	0.26	6	0
HIS	3.74	2.13	0.34	9	0
DEP	1.66	1.80	0.29	6	0
CVC	0.82	1.09	0.18	4	0
GIC	1.00	1.70	0.27	8	0
INC	1.13	1.49	0.24	5	0
HIP	2.21	2.21	0.36	8	0
OBS	1.34	1.28	0.21	5	0
IMP	0.71	0.96	0.15	3	0
AGR	2.28	2.15	0.35	7	0
PRN	1.16	1.19	0.19	5	0
FLK	6.48	0.98	0.16	9	5
SPO	6.21	1.09	0.18	9	5

Table 2. Regression of success performing dance structures in sport dance

Variable	Beta	PC	COR
ANX	0.43	−0.43	−0.43
NEU	−0.02	−0.02	
FOB	−0.05	−0.05	
HIS	−0.13	−0.10	
DEP	0.12	0.11	
CVC	0.20	0.21	
GIC	−0.10	−0.10	
INC	0.00	0.00	
HIP	−0.10	−0.10	
OBS	0.03	0.02	
IMP	0.02	0.01	
AGR	0.14	0.14	
PRN	0.16	0.16	
MC = 0.43	PEV = 0.18	F = 8.10	K = 0.00

Table 3. Regression of success performing dance structures in folk dance

Variable	Beta	PC	COR
ANX	−0.32	−0.32	−0.32
NEU	−0.15	−0.15	
FOB	−0.03	−0.03	
HIS	−0.01	−0.01	
DEP	0.09	0.08	
CVC	0.00	0.00	
GIC	−0.19	−0.19	
INC	−0.18	−0.19	
HIP	−0.21	-0.20	
OBS	−0.09	−0.08	
IMP	0.05	0.05	
AGR	0.07	0.07	
PRN	0.05	0.05	
MC = 0.32	PEV = 0.10	F = 4.26	K = 0.04

System of applied predictor variables considerable explains performing dance structures of folk dances (Table 3). Multiple correlation numeric value is .32. Percentage of explained variance is 10. The biggest considerable importance in success in negative sense, has anxiety.

For criterion general valuation of success in dance is comprised of success in performing structures sport dance and structure folk dance, system of predictor variables explains 12% of variance (Table 4). Multiple correlation is .34 and it is importante on level .03.

Generaly looking, variables of applied conative dimensiones considerable explain success in performing dance structures. Between conative characteristic biggest part in performing dance structures have anxiety and hypochondria. Both dimension in their bases have fear. Fear arises from anxiety and it's close with fear of failure. Anxiety

influence the most on result of success in performing structures of sport dance which can be explained with double fear: from one side fear from failure on exame, and from other side fear of a partner (realisation dance structures of sport dance is conducted in pairs).

Some research (Warburton and Kane, 1967; Husman, 1969), by Kejn, (1984), affirm that physical able persones can be marked with extraversion aspirations and with abilities for general emocional controle and low anxiety. In Ajzenk's research (1959), by Kejn, (1984) neuroticism in correlation with anxiety, as a state of weak physical condition (Breen, 1959, by Kejn, 1984), what reflects on indicationes of cardiovascular system.

Structures technic of sport dance and folk dance which students had to demonstrate on exame fall under in coordinatione complex movement.

In research S. Horge (1979) shows that anxiety presents "murmur" manifestacion of coordinative regulative mechanism, which is partially showed with this research.

Toward the Izard, K.E. (1997) anxiety is expressed by changeable mixed emotions of fear with other negative emotions like depression, shame and other. It is supposed that this assertion can be conect with results of this research.

4. Conclusion

Research was conducted on sample of 38 students of physical education from Nish. Aim of research was to determine influence on conative characteristics on success in performing technic of dance structures.

Sample of variables includes next:

For evaluation efficacy of the system for regulation and controle of organic function: - cardiovascular conversion (CVC); - gastrointestinal conversion (GIC); - inhibitory conversion (IHC); - hypochondria (HIP)

For evaluation efficacy of the system for regulation and controle of defence reaction: - anxiety (ANX); - obsession(OBS); hypersensitivity (HIS); - fobical (FOB)

For evaluation efficacy of the system for regulation and controle of attack: -impulsiveness (IMP); - aggressiveness (AGR).

For evaluation efficacy of the system for homeostatical regulation: - paranoid (PRN); -depression (DEP)

For evaluation efficacy of the system for regulation ekscitation and inhibition: - neuroticism (NEU)

For evaluation of success in performing dance structures, two tests were applied:

Test SPO measures abilities of performing dance structures of sport dance.

Test FLK measures abilities of performing dance structures of folk dance.

Particularities are process with regressive analyses.

Supposition that conative characteristics influence on success in performing technic dance structures sport and folk dance, was confirmed with this research. As predictors of success in this kind of dances, anxiety and hypochondria are specialy emphasize as factors which act negative and disturbative.

References

1. Akandere, M., Tekin, A. (2002). The efect of physical exercise on anxiety. World Wide Web: http://www.thesportjournal.org/2002journal/Vol5-No2/anxiety.htm

2. Davis, J., Cox, R.(2002). Interpreting Direction of Anxiety Within Hanin's Individual Zone of Optimal Functioning. Journal of Applied Sport Psychology, 14(1), 43-52.
3. Dunn, J., Dunn, J.C.(2001). Relationships Among the Sport Competition Anxiety Scale, and the Collegiate Hockey Worry Scale. Journal of Applied Sport Psychology, 13(4), 411-429.
4. Ećimović-Žgajnjer, S. (1981). Uticaj nekih kognitivnih i konativnih faktora na reproduciranje melodije kao muzikalne komponente kod studentica fizičke kulture (The effect of some cognitive and conative factors upon reproduction of melody as a component of music on a sample of female students at the faculty of physical education). Kineziologija, 12 (1-2), 103-111.
5. Horga, S. (1979). Relacije konativnih karakteristika i motoričkih sposobnosti (The relations of conative characteristics and motoric abilities). Kineziologija, 9 (1-2),91-107.
6. Izard, K.E. (1997). Emocii celoveka (Emotions of man). Moskva: Izdateljstvo Moskovskogo Universiteta.
7. Kejn, Dž.E. (1984). Ličnost, pojam o telu i ponašanje (Personality, conception of the body and behaviour). U Kejn,Dž,E, Psihologija i sport (Psychology and sport). (143-186). Beograd: Nolit
8. Mraković, M. (1978). Relacije između ekstraverzije i koordinacije (The relatione between extraversion and coordination). Kineziologija, 8 (1-2), 51-64.
9. Paunonen, S. (1998). Hierarchical organization of personality and prediction of behavior. Journal of Personality & Social Psychology, 74 (2), 538-556.

RELACIJE KONATIVNIH KARAKTERISTIKA I USPEŠNOSTI IZVOĐENJA PLESNIH STRUKTURA

Radmila Kostić, Dragan Jocić, Slavoljub Uzunović

Istraživanje je sprovedeno na uzorku 38 studenata fizičke kulture iz Niša. Cilj istraživanja je bio da se utvrdi uticaj konativnih osobina na uspešnost u izvođenju plesnih struktura.

Uzorak varijabli je obuhvatio prediktorske (za konativne dimenzije: Kornel index - verzija C.I. -N4 i Ajzenkov Maudsley Personality Inventory) i kriterijske (ocene uspešnosti izvođenja plesnih struktura sportskog plesa i narodnih igara). Podaci su obrađeni regresionom analizom.

Istraživanjem je potvrđena pretpostavka da konativne karakteristike utiču na uspešnost izvođenja plesnih struktura sportskog i narodnog plesa. Kao prediktori uspeha navedenih vrsta plesa posebno se ističu anksioznost i hipohondrija kao remeteći faktori.

Ključne reči: konativne karakteristike, tehnike plesnih struktura, uspeh